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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/748,677

12/31/2003

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VERC-003

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25235 7590 06/03/2008  
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EXAMINER

SAINT CYR, LEONARD

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

06/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,677	<b>Applicant(s)</b> BABA ET AL.	
	<b>Examiner</b> LEONARD SAINT CYR	<b>Art Unit</b> 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-24, and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 02/20/08 have been fully considered but they are not persuasive.

Applicant argues that Donahue does not teach that a plurality of triggers function as a trigger for another of the plurality of triggers (Amendment, page 8).

The examiner disagrees, Donahue teaches that "some categories are hierarchical, containing no regular expressions but depend upon matches by constituent categories" (paragraph 7, lines 9 - 12). Having hierarchical categories implies a plurality of triggers function as a trigger for another of the plurality of triggers, since some categories depend upon matches by constituent categories.

Applicant argues that Donahue does not teach dynamically re-ordering the computations (Amendment, page 9).

The examiner disagrees, Donahue teaches that "each category is assigned a numeric value. Each key phrase or regular expression within a category is also assigned a numeric value. When a log is examined, the sum of all values associated with each matching key phrase or regular expression is compared with the value for the category" (paragraph 17, lines 5 - 10). Comparing the sum of all values associated with matching key phrases with the value for the category implies dynamically re-ordering the computations.

Applicant argues that Donahue does not teach or suggest ordering a plurality of pre-requisite triggers based on decreasing absolute value of a score associated with each of the plurality triggers (Amendment, page 9).

The examiner disagrees, Donahue describes a subroutine category search in paragraph 25, that order a plurality of pre-requisite triggers based on decreasing absolute value, since key phrases search follow a decreasing absolute value from -4, -2, +2, and +1 (paragraph 25).

Applicant argues that Donahue does not teach or suggest determining whether a score of the first pre-requisite trigger is greater than zero (Amendment, page 10).

The examiner disagree, Donahue teaches that "within each category, a regular expression can be assigned a positive or negative value. Using negative values facilitates avoidance of "false hits" or undesired matches" (paragraph 19). Assigning a positive or negative value to regular expression within a category implies determining whether a score of the first pre-requisite trigger is greater than zero, since negative values are used to avoid false hits.

Applicant argues that Donahue does not teach or suggest an Avoid Evaluation of this Trigger rating associated with the first pre-requisite trigger; determining if the first pre-requisite is not a hit (Amendment, pages 11, and 12).

The examiner disagree, Donahue teaches that "within each category, a regular expression can be assigned a positive or negative value. Using negative values facilitates avoidance of "false hits" or undesired matches" (paragraph 19). Assigning a positive or negative value to regular expression within a category implies using an Avoid Evaluation of this Trigger rating; and determining if the first pre-requisite is not a hit, since the numeric values are used to avoid undesired matches or false hits.

2. Applicant's arguments, see page 11, section B, filed 02/20/08, with respect to claims 25, and 29 have been fully considered and are persuasive. The rejection of claims 25, and 29 has been withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 – 24, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Donahue (US PAP 2002/0004907).

As per claim 1, Donahue teaches a method for linguistic analysis comprising:  
receiving a user selection of at least one category from a list of pre-defined categories, wherein the categories include complex aggregate behavior with a plurality of triggers in a hierarchical relationship and at least one of the plurality of triggers is a

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trigger for another of the plurality of triggers ("some categories are hierarchical, containing no regular expressions but depend upon matches by constituent categories" paragraph 7, lines 1 – 12);

preparing by collecting the data from at least one of a data stream, a file system, and a database ("the file is considered a match for that category"; paragraph 17, lines 8 –11);

evaluating and scoring the data for the selected at least one category based on the complex aggregate behavior ("assigned a positive or negative value"; paragraph 19, lines 1 – 4).

As per claim 2, Donahue further discloses receiving a custom category definition from the user, scoring the data further based on the custom category definition (paragraph 20).

As per claim 3, Donahue further discloses the custom category is dependent upon the user-selected category ("categories are pre-defined"; paragraphs 20, and 21; paragraph 7, lines 1 - 3).

As per claim 4, Donahue further discloses determining whether the user-selected category is a hit based on the tally; and performing at least one predetermined action where it is determined that the user-selected category is a hit ("sum weighted values

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exceeds a threshold value, the communication is stored for subsequent review by an authorized user”; paragraph 19, lines 1 – 3; Abstract, lines 7 – 11).

As per claim 5, Donahue further discloses determining is based on at least one of threshold scoring and Boolean logic scoring (Abstract, lines 7 – 11).

As per claim 6, Donahue further discloses that the predetermined action is at least one of blocking access, alerting an administrator, and logging data (“the communication is stored”; Abstract, lines 7 – 11).

As per claim 7, Donahue further discloses that the step of evaluating and scoring the data comprises a plurality of computations and the method further comprises dynamically re-ordering the computations (“each category is assigned a numeric value. Each key phrase or regular expression within a category is also assigned a numeric value. When a log is examined, the sum of all values associated with each matching key phrase or regular expression is compared with the value for the category”; paragraph 17, lines 5 - 10).

As per claim 8, Donahue further discloses defining complex aggregate behavior includes associating a score with each of the plurality of triggers (“each regular expression within a category is assigned a numeric value”; paragraph 17, lines 5 – 8).

As per claim 9, Donahue further discloses defining complex aggregate behavior further includes applying at least one of an addition operator, a subtraction operator, a multiplication operator and a division operator to the score associated with at least one of the plurality of triggers (“sum of all values associated”; paragraph 17, lines 8 – 11).

As per claim 10, Donahue further discloses defining complex aggregate behavior further includes applying a negation operator to the score of at least one of the plurality of triggers (“negative value”; paragraph 19, lines 1 –3).

As per claim 11, Donahue further discloses defining complex aggregate behavior includes associating a pattern tuple with at least one of the plurality of triggers (“comparing the log data with known protocol patterns”; paragraph 13, lines 6 – 9).

As per claim 12, Donahue further discloses simplifying the complex aggregate behavior by combining two or more triggers having the same associated pattern tuple (“sum of all values associated with each matching key phrase”; paragraph 17, lines 8 – 11).

As per claim 13, Donahue further discloses defining complex aggregate behavior includes associating a list of pre-requisite triggers, scores for each of the pre-requisite triggers, and negation status with at least one of the plurality of triggers (“negative values”; paragraph 17, lines 5 – 8; paragraph 19, lines 1 – 3).



As per claim 14, Donahue further discloses simplifying the complex aggregate behavior by combining two or more triggers having the same associated list of pre-requisite triggers, scores for each of the pre-requisite triggers, and negation status (paragraph 17, lines 5 – 8; paragraph 19, lines 1 – 3; paragraph 25).

As per claim 15, Donahue further discloses defining complex aggregate behavior includes associating at least one of a plurality of actions with at least one of the plurality of triggers (“acquisition category”; paragraph 21).

As per claim 16, Donahue further discloses simplifying the complex aggregate behavior by not resolving any of the plurality of triggers that are not associated with at least one of the plurality of actions (paragraph 25 shows an example of a complex aggregate behavior simplification; paragraph 25).

As per claims 17, and 28, Donahue teaches a method for linguistic analysis comprising:

receiving data; setting a tally for a containing trigger equal to zero; ordering a plurality of pre-requisite triggers based on decreasing absolute value of a score associated with each of the plurality of pre-requisite triggers (Donahue describes a subroutine category search in paragraph 25, that order a plurality of pre-requisite

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triggers based on decreasing absolute value, since key phrases search follow a decreasing absolute value from -4, -2, +2, and +1; paragraphs 21, 22, and 25); and selecting one of the plurality of pre-requisite triggers based on the order (“resume (attached/enclosed)” will be searched first”; paragraph 21, lines 6 – 10).

As per claim 18, Donahue further discloses determining whether the selected one of the plurality of triggers is a hit (“match”; paragraph 25, line 4);

if the selected one of the plurality of triggers is a hit, updating the tally by adding to the tally the score associated with the selected one of the plurality of triggers (“sum being set to -4”; paragraph 25, line 5) ;

determining whether the updated tally less the sum of absolute values of scores associated with each unresolved trigger within the plurality of pre-requisite triggers is greater than a predetermined threshold (“sum is not greater than or equal to 4”; paragraph 25, lines 5 -7);

and if the updated tally less the sum of absolute values of scores associated with each unresolved trigger within the plurality of pre-requisite triggers is greater than the predetermined threshold, resolving the containing trigger as a hit (“sum is greater than or equal to 4, the log is saved”; paragraph 27, lines 9 – 12).

As per claim 19, Donahue further discloses that if the updated tally less the sum of absolute values of scores associated with each unresolved trigger within the plurality of pre-requisite triggers is not greater than the predetermined threshold, determining

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whether each of the pre-requisite triggers have been selected (“the text is not considered a match for this category and the log is deleted”; paragraph 25, lines 20, and 21); and

if each of the pre-requisite triggers have been selected, resolving the containing trigger as a non-hit (“false hit”; paragraph 19, lines 15 – 17).

As per claim 20, Donahue teaches defining a category having a first pre-requisite trigger and a second pre-requisite trigger; receiving a first data set (“acquisition category, the regular expression “resume (attached/enclosed)”; paragraph 21, lines 6 – 10);

determining whether the first pre-requisite trigger is a hit based on the first data set (“match”; paragraph 25, line 4; paragraph 19, lines 1 - 4);

if the first pre-requisite trigger is a hit, determining whether a score of the first pre-requisite trigger is greater than zero (“sum is not greater than or equal to 4”; paragraph 25, lines 5 -7; paragraph 19, lines 1 - 4);

if the score of the first pre-requisite trigger is greater than zero, determining whether the second pre-requisite trigger is a hit based on the first data set (“the sum is greater than or equal to 4”; paragraph 27, lines 8 – 12; paragraph 19, lines 1 - 4);

if the second pre-requisite trigger is a hit, determining whether a score of the second pre-requisite trigger is greater than zero (“sum is not greater than or equal to 4”; paragraph 25, lines 5 -7; paragraph 19, lines 1 - 4); and

if the score of the second pre-requisite trigger is greater than zero, resolving the category as a hit with respect to the first data set (“the log is saved and the search is finish for this category”; paragraph 27, lines 8 – 12; paragraph 19, lines 1 - 4).

As per claim 21, Donahue further discloses that if the first pre-requisite trigger is a hit, increasing an Avoid Evaluation Of This Trigger (AEOTT) rating associated with the first pre-requisite trigger (“a regular expression can be assigned a positive or negative value ... facilitates avoidance”; paragraph 19, lines 1 – 4).

As per claim 22, Donahue further discloses receiving a second data set; determining whether the second pre-requisite trigger is a hit based on the second data set (“match”; paragraph 25, line 4);

if the second pre-requisite trigger is a hit, determining whether a score of the second pre-requisite trigger is greater than zero (“sum is not greater than or equal to 4”; paragraph 25, lines 5 -7; paragraph 19, lines 1 - 4);

if the score of the second pre-requisite trigger is greater than zero, determining whether the first pre-requisite trigger is a hit based on the second data set (“the sum is greater than or equal to 4”; paragraph 27, lines 4 – 12; paragraph 19, lines 1 - 4);

if the first pre-requisite trigger is a hit, determining whether a score of the first pre-requisite trigger is greater than zero; and if the score of the first pre-requisite trigger is greater than zero, resolving the category as a hit with respect to the second data set

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("the log is saved and the search is finished for this category"; paragraph 27; paragraph 19, lines 1 - 4).

As per claim 23, Donahue teaches a method for linguistic analysis comprising:

defining a category having a first pre-requisite trigger and a second pre-requisite trigger; receiving a first data set ("acquisition category, the regular expression "resume (attached/enclosed)"; paragraph 21, lines 6 – 10; paragraph 19, lines 1 - 4);

determining whether the first pre-requisite trigger is a hit based on the first data set ("match"; paragraph 25, line 4; paragraph 19, lines 1 - 4);

if the first pre-requisite trigger is a hit, determining whether a score of the first pre-requisite trigger is greater than zero; if the score of the first pre-requisite trigger is greater than zero, resolving the category as a hit with respect to the first data set ("because sum is greater than or equal to 4, the log is saved and the search is finished for this category"; paragraph 27, lines 9 – 12; paragraph 19, lines 1 - 4)

if the first pre-requisite trigger is not a hit, determining whether the second pre-requisite trigger is a hit based on the first data set; if the second pre-requisite trigger is a hit, determining whether a score of the second pre-requisite trigger is greater than zero; and if the score of the second pre-requisite trigger is greater than zero, resolving the category as a hit with respect to the first data set ("because sum is greater than or equal to 4, the log is saved and the search is finished for this category"; paragraph 27; paragraph 19, lines 1 - 4).

As per claim 24, Donahue further discloses that if the first pre-requisite trigger is a hit, decreasing an Avoid Evaluation Of This Trigger (AEOTT) rating associated with the first pre-requisite trigger ("a regular expression can be assigned a positive or negative value ... facilitates avoidance"; paragraph 19, lines 1 – 3).

### ***Allowable Subject Matter***

5. Claims 25, and 29 are allowed over the prior art of record. The following is an examiner's statement of reasons for allowance:

After further search and thorough examination of the present application and in view of the Applicant's arguments and amendments, page 11, section B, claims 25, and 29 are found to be in condition for allowance over the prior art made of record.

6. The following is an examiner's statement of reasons for allowance: Applicant teaches performing an early exit based on mounting negative values for found phrases. This limitation in conjunction with other limitations of the independent claims were not shown by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD SAINT CYR whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 2626